## REMARKS

Claim 4 has been cancelled. Claims 1, 7, 16, and 17 have been amended to clarify the subject matter regarded as the invention. Claims 1-3 and 5-17 remain pending.

The specification has been amended to delete the claim of priority to which the Examiner objected.

The attached replacement drawings, and the amendments to the specification with respect to Figure 6, are believed to overcome the objections to the drawings.

The amendments to claim 7, which are supported without limitation in the application at page 90, line 7 - page 91, line 20, are believed to overcome the rejection of claims 7-12 under 35 USC 112, second paragraph.

The amendments to claims 1 and 16 are believed to overcome the rejection of claims 1-16 under 35 USC 101. With respect to claim 1, and claims 2-15 which depend from claim 1, the claim has been amended to recite that the analysis engine comprises a processor and to specify more clearly the concrete, useful, and tangible result that may be produced through a practical application of the recited system. Claim 16 has been amended to specify more clearly the concrete, useful, and tangible result that may be produced through a practical application of the recited method. As such, claims 1-16 are believed to satisfy the requirements of 35 USC 101.

The rejection of claims 7-12 under 35 USC 101 is believed to be overcome by the amendment to claim 7, which specifies more clearly how continuations are used in the system of claim 7.

The Examiner has rejected claims 1-17 under 35 USC 102(a) as being anticipated by Thuraisingham.

The rejection is respectfully traversed. With respect to claim 1, Thuraisingham describes a system and method for detecting security violations in a multilevel secure database. While the Office Action notes correctly that Thuraisingham describes a rule-based system, and further describes using forward chaining and backward chaining in the context of such a system, Thuraisingham does not provide an enabling disclosure of a hybrid system in which both forward chaining and backward chaining are used as recited in claim 1. While Thuraisingham makes passing mention of the fact that such a hybrid approach "has also been proposed", Thuraisingham at col. 17, lines 41-43, Thuraisingham does not enable such an approach. The discussion in Thuraisingham at col. 24, lines 16-42, describes how either forward chaining or backward chaining may be implemented using the Prolog language, it does not describe how the two could be used together in a hybrid approach as disclosed by applicants and as recited in claim 1. Specifically, Thuraisingham does not teach "(i) using forward chaining to generate one or more inferences; (ii) determining which, if any, of the inferences matches a sub-goal associated with a rule from the source of rules; (iii) with respect to each inference that matches a sub-goal, applying backward chaining from that sub-goal's potential parents into other sub-goals; and (iv) for each sub-goal reached either by forward or backward chaining, determining whether the sub-goal indicates an intrusion has taken place," as recited in claim 1. As such, claim 1 is believed to be allowable.

Claims 2-15 depend from claim 1 and are believed to be allowable for the same reasons described above.

Claims 16 and 17 have been amended similarly to claim 1 and are believed to be allowable for the same reasons described above.

Reconsideration of the application and allowance of all claims are respectfully requested based on the preceding remarks. If at any time the Examiner believes that an interview would be helpful, please contact the undersigned.

Respectfully submitted,

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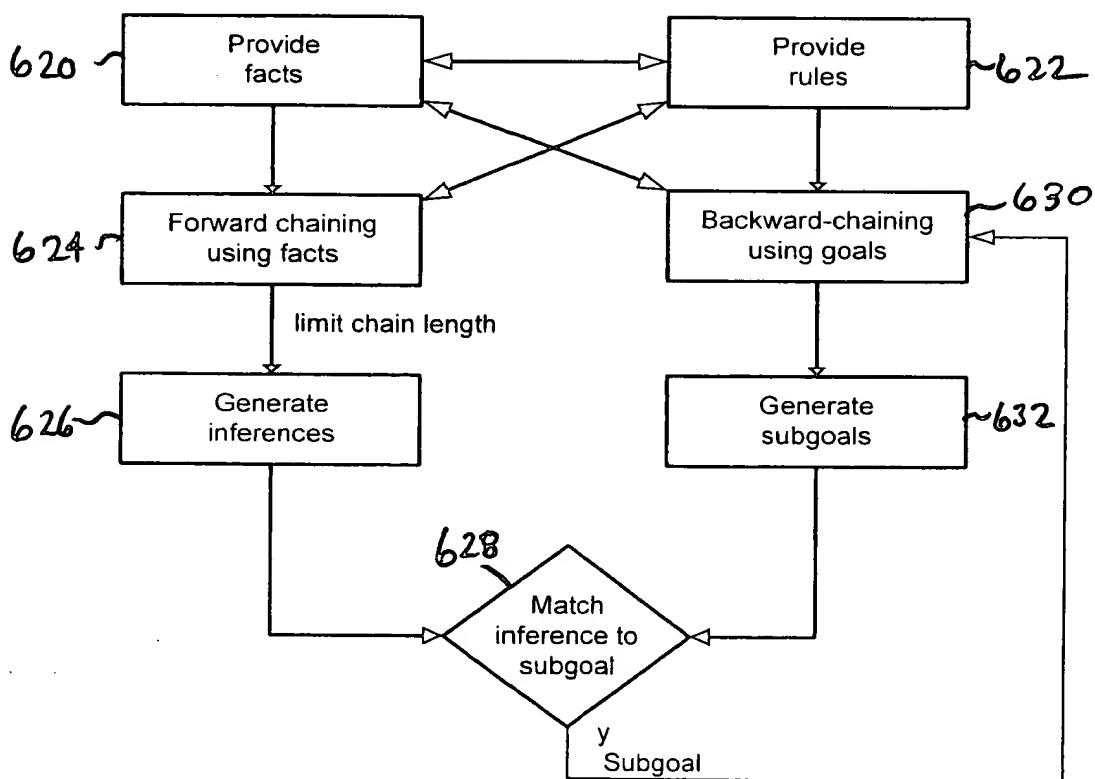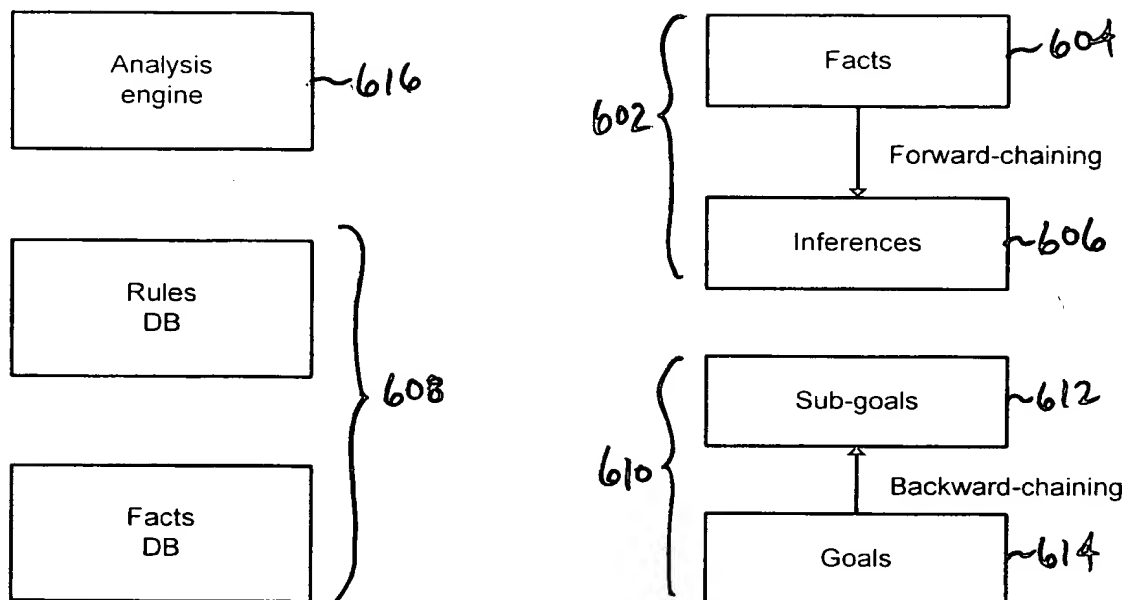10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014

Analysis engine ~616

Rules DB

Facts DB

} 608

Facts ~604

Forward-chaining

Inferences ~606

602 {

Sub-goals ~612

Backward-chaining

Goals ~614

610 {

620 — Provide facts

Provide rules ~622

624 — Forward chaining using facts

Backward-chaining using goals ~630

limit chain length

626 — Generate inferences

Generate subgoals ~632

628 — Match inference to subgoal

y
Subgoal

FIG 6